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<p>Substitute for form 1449A/PTO</p> <p><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b></p> <p><i>(use as many sheets as necessary)</i></p>				<i>Complete if Known</i>	
				<b>Application Number</b>	10/029,158
				<b>Filing Date</b>	December 21, 2001
				<b>First Named Inventor</b>	Suh, et al.
				<b>Group Art Unit</b>	3723
				<b>Examiner Name</b>	not assigned
Sheet	1	of	2	Attorney Docket Number	A-69175-1/MSS

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

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U.S. PATENT DOCUMENTS						Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY		
		Number	Kind Code <sup>2</sup> (if known)				
TAC		5,716,258		Robert L. Metcalf	02/10/98		
		5,851,140		Barnes, et al.	12/22/98		
		5,916,015		John Natalicio	06/29/99		
		5,980,367		Robert L. Metcalf	11/09/99		
		5,993,302		Chen, et al.	11/30/99		
		6,024,630		Shendon, et al.	02/15/00		
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## FOREIGN PATENT DOCUMENTS

Examiner Signature		Date Considered	8/20/03
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				Group Art Unit	3723
				Examiner Name	not assigned
Sheet	2	of	2	Attorney Docket Number	
				A-69175-1/MSS	

#### OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

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				Application Number	10/029,158
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				First Named Inventor	Nam P. Suh
				Group Art Unit	3723
				Examiner Name	To be Assigned
Sheet	1	of	3	Attorney Docket Number	A-69175-1/MSS

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
		4,959,113		John V. H. Roberts	September 25, 1990	
		5,069,002		Sandhu, et al.	December 3, 1991	
		5,433,651		Lustig, et al.	July 18, 1995	
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		5,676,587		Landers, et al.	October 14, 1997	
		5,770,103		Wang, et al.	June 23, 1998	
		5,835,225		Randhir P. S. Thakur	November 10, 1998	
		5,838,448		Aiyer, et al.	November 17, 1998	
		5,840,629		Roanld A. Carpio	November 24, 1998	
		5,897,375		Watts, et al.	April 27, 1999	
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		5,964,653		Perlov, et al.	October 12, 1999	

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Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office <sup>3</sup>	Number <sup>4</sup>			
		EP	0881484	A2	LAM Research Corporation	02 December 1998
		WO	99/02304	A1	Applied Materials, Inc.	21 January 1999

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		Number	Kind Code <sup>2</sup> (if known)			
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		5,985,679		Michael J. Berman	November 16, 1999	
		5,985,748		Watts, et. al.	November 16, 1999	
		6,001,730		Farkas, et al.	December 14, 1999	
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		6,036,587		Tolles et al.	March 14, 2000	
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		6,077,452		Herbert E. Litvak	June 20, 2000	
		6,179,956	B1	Nagahara, et al.	January 30, 2001	
		6,204,922	B1	Scott A. Chalmers	March 20, 2001	
		6,238,590	B1	Fischer, et al.	May 29, 2001	
		6,257,953	B1	Gitis, et al.	July 10, 2001	
		6,290,584	B1	Kim, et al.	September 18, 2001	

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				Attorney Docket Number	A-69175-1/MSS

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			
W		Adams, et al., "Process Control and Endpoint Detection with Fullscan ISRM System in Chemical Mechanical Polishing of Cu Layers," CMP-MIC, March 2000, 5 pages			
		Bonner et al., "Removal Rate, Uniformity and Defectivity Studies of Chemical Mechanical Polishing of BPSG Films," MRS, Spring 2000, 6 pages			
		Garretson et al., "New Pad Conditioning Disk Design Delivers Excellent Process Performance While Increasing CMP Productivity," CMP Technology for ULSI Interconnection, SEMICON West 2000, 9 pages			
		Osterheld et al., "A Novel Retaining Ring in Advanced Polishing Head Design for Significantly Improved CMP Performance," MRS, April 5-9, 1999, 8 pages			
		Römer et al., "STI CMP Using Fixed Abrasive Demands, Measurement Methods and Results," CMP-MIC, March 2000, 10 pages			
		Surana et al., "Defectivity Reduction in Copper CMP Processes," VMIC, June 2000, 3 pages			
✓		Tang, et al., "Novel Integrated Single Wafer Immersion Megasonics for Advanced Post CMP Cleaning in a Next Generation Dry-in Dry-out CMP System," CMP-MIC, March 2000, 5 pages			

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